

AMENDMENTS TO THE CLAIMS

1. (currently amended): A method performed on at least one processor for multiplexing applications, the method comprising the steps of:

providing at least one access server that has access to at least one application, the at least one application capable of having a plurality of running instances, each of the instances capable of receiving and processing requests for a first service provided by the application during a session with a client;

receiving a request from at least one client at the access server to access the first service provided by the at least one application;

based on the received request, establishing a communication link between the at least one access server and the at least one client;

storing the received request in an input request queue with other received requests, wherein the number of received requests may be greater than the number of running instances;

checking for an available communication path to the requested application, an available communication path being present when an instance of the requested application is available and ready to accept a new request;

when an available communication path is available, establishing the communication path between the input request queue and the at least one application;

removing the stored request; and

sending the stored request to the requested application; and

establishing a communication path between the client and the requested application,
thereby establishing a session with the client and the requested application and providing the first
service to the client.

2. (original): The method according to claim 1, further comprising the step of:

identifying a media transmission protocol based on the received request,

wherein the established communication link is capable of transmitting the identified media transmission protocol.

3. (original): The method according to claim 2, further comprises the steps of:
verifying an accuracy of transmitted data; and
re-transmitting inaccurate data.

4. (original): The method according to claim 1, wherein the establishing the communication link step uses,
at least one of session initiation protocols, H.323 protocols, MGCP protocols, MEGACO protocols, and H.248 protocols.

5. (original): The method according to claim 2, wherein the identifying the media transmission protocol uses,
session description protocols.

6. (original): The method according to claim 2, wherein the identified media is a real-time transport protocol.

7. (original): The method according to claim 1, wherein the receiving the request step further comprises:

accepting a request at a request handler;
generating a service request; and
transmitting the generated service request to the input request queue for storage.

8. (currently amended): A method performed on at least one processor for multiplexing applications, the method comprising the steps of:

initializing at least one requests handler and at least one application handler;
accepting at least one request from at least one client to access a first service provided by a first at least one application;
passing the accepted request to an initialized request handler;
completing a service request based on the passed accepted request;
putting the completed service request in an input queue associated with the first service;

using an application handler to get the completed service request put in the input queue, the number of completed service requests in the input queue being greater than the number of applications capable of processing the completed service requests;

sending the got completed service request to the first ~~at least one~~ application when ~~at least one~~ the first application is available to process the service request;

establishing a session with the first application; and

establishing a communication link between the client and the first application

~~performing the completed service request; and~~

~~returning the completed service.~~

9. (currently amended): An apparatus for service multiplexing, the apparatus comprising:
at least one access server capable of providing access to at least one application providing at least a first service that has an associated cost;

the at least one access server comprising at least one agent and at least one service concentrator; and

the at least one service concentrator comprising at least one application handler, at least one input service queue, and at least one request handler,

such that the at least one access server is adapted to receive multiple requests from multiple clients to establish a session with ~~aceess~~ the first service at the at least one application and the at least one service concentrator is adapted to multiplex the multiple requests to establish sessions with ~~aceess~~ the first service at the at least one application and thereby divide the cost associated with the first service among the multiple clients.

10. (original): The apparatus according to claim 9, wherein the at least one agent comprises:

at least one SIP user agent.

11. (original): The apparatus according to claim 10, wherein the at least one agent comprises:

at least one SDP agent.

12. (original): The apparatus according to claim 11, wherein the at least one agent comprises:

at least one MTP agent.

13. (original): The apparatus according to claim 12, wherein the at least one MTP agent comprises:

real-time transport protocols.

14. (original): The apparatus according to claim 9, wherein the at least one service concentrator further comprises:

at least one service output queue.

15. (original): The apparatus according to claim 9, further comprising:

at least one transmitting client to transmit a service request; and

at least one receiving client to receive a processed request.

16. (currently amended): A computer program product comprising:

a computer usable medium including computer readable code embodied therein for processing data to control at least one requests for access to at least one application, the computer usable medium comprising:

a request receiving module configured to receive at least one request for access to at least a first service provided by a first the at least one application;

a communication establishing module configured to establish a communication link with at least one client requesting access to the first at least one application;

a storing module configured to store the at least one received request;

a checking module configured to check whether a communication path that is capable of allowing access to the first at least one application is available; and

the communication establishing module further configured to establish a communication link with the first at least one application, wherein the number of requests for access to the first

~~at least one~~ application are capable of being greater than the number of requests capable of being processed by the first ~~at least one~~ application.

17. (original): The computer program product according to claim 16, further comprising:
a service concentration module configured comprise:
at least one request handler;
the at least one request handler generating at least one service request to be stored in the storing module; and
at least one application handler, such that the at least one application handler removes the stored request and transmits the stored request to the at least one application for processing.

18. (original): The computer program product according to claim 16, wherein the communication module is further configured to output at least one processed request to at least one address indicated by the at least one client.

19. (original): The computer program product according to claim 16, wherein the storing module is further configured to store at least one processed request prior to delivery.

20. (original): The computer program product according to claim 17, further comprising:
a sip agent module configured to provide call control.

21. (original): The computer program product according to claim 20, further comprising:
a sdp agent module configured to provide session descriptions,
such that the sip agent module directs the at least one request to a compatible request handler module.

22. (original): The computer program product according to claim 21, further comprising:
a media transport protocol agent configured to provide transport protocols.

23. (currently amended): A computer program product comprising:

a computer usable medium including computer readable code embodied therein for processing data to control at least one requests for access to at least one application, the computer usable medium comprising:

 a request receiving module configured to receive at least one request for access to a first service provided by the at least one application;

 a first communication establishing module configured to establish a communication link with at least one client requesting access to the first service provided by the at least one application;

 a storing module configured to store the at least one received request;

 a checking module configured to check whether a communication path that is capable of allowing access to the at least one application; and

 a second communication establishing module configured to establish a communication link with the at least one application and thereby establish a communication link between the client and the application, wherein the first communication establishing module is configured to establish more communication links than the second communication establishing module.

24. (original): The computer program product according to claim 23 further comprising:

 a third communication establishing module configured to establish a communication link with at least one address to receive at least one processed request.